

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-49 (Canceled)

Claims 50-68 (Canceled)

69. (New) A pharmaceutical composition for treating diabetes comprising an effective amount of self-antigen for diabetes; and EtxB, wherein EtxB has an effect on ganglioside GM-1 mediated intracellular signaling events and is capable of modulating a ganglioside associated activity in an amount effective to treat autoimmune disease.

70. (New) The composition according to claim 69 wherein the self-antigen for diabetes is GAD.

71. (New) The composition according to claim 69 wherein the self-antigen for diabetes is insulin.

72. (New) The composition according to claim 69 wherein EtxB and the self-antigen for diabetes are not so linked to form a single active agent.

73. (New) The composition according to claim 69 wherein the self-antigen for diabetes is an islet associated antigen.

74. (New) The composition according to claim 69 wherein the pharmaceutical composition is further characterized as a prophylaxis.

75. (New) The pharmaceutical composition according to claim 69, wherein said pharmaceutical composition is in the form of a lotion, a solution, a cream, an ointment, a dusting powder, a skin-patch, a nasal spray, an aerosol, an injectable, a pessary, a suppository, a tablet, or a capsule.

76. (New) The pharmaceutical composition according to claim 69 further comprising at least one preservative.

77. (New) The pharmaceutical composition according to claim 69, wherein said composition is adapted for systemic administration.

78. (New) The pharmaceutical composition according to claim 69, wherein said composition is adapted for oral, injection, topical, inhalation, parenteral, mucosal, intramuscular, intravenous, subcutaneous, intraocular, or transdermal administration.

79. (New) A pharmaceutical composition for treating diabetes comprising a self-antigen for diabetes, and EtxB, wherein said EtxB is capable of modulating a ganglioside associated activity in an amount effective to treat autoimmune disease, and wherein said EtxB has an effect on ganglioside GM-1 mediated intracellular signaling events, with the proviso that if said self-antigen for diabetes is for coadministration with EtxB, then the self-antigen for diabetes and EtxB are not so linked to form a single active agent.

80. (New) The composition according to claim 79 wherein the self-antigen for diabetes is GAD.

81. (New) The composition according to claim 79 wherein the self-antigen for diabetes is insulin.

82. (New) The composition according to claim 79 wherein the self-antigen for diabetes is an islet associated antigen.

83. (New) The composition according to claim 79 wherein the pharmaceutical composition is further characterized as a prophylaxis.

84. (New) The pharmaceutical composition according to claim 79, wherein said pharmaceutical composition is in the form of a lotion, a solution, a cream, an ointment, a dusting powder, a skin-patch, a nasal spray, an aerosol, an injectable, a pessary, a suppository, a tablet, or a capsule.

85. (New) The pharmaceutical composition according to claim 79 further comprising at least one preservative.

86. (New) The pharmaceutical composition according to claim 79, wherein said composition is adapted for systemic administration.

87. (New) The pharmaceutical composition according to claim 79, wherein said composition is adapted for oral, injection, topical, inhalation, parenteral, mucosal, intramuscular, intravenous, subcutaneous, intraocular, or transdermal administration.